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Amendments to and Listing of the Claims

1. (Original) A method for sterilizing industrial products comprising the steps of

conditioning an industrial product to be sterilized by placing the product in

a chamber, evacuating the chamber, pulsing steam and/or heated inert gas into the

chamber, and re-evacuating the chamber;

injecting a sterilent gas into the chamber;

introducing an overpressure of inert gas into the chamber;

holding the product in the chamber until the products is sterilized;

degassing the product.

2. (Original) The method for sterilizing industrial products of claim 1 wherein

the heated inert gas is Nitrogen and wherein the sterilent gas is ethylene oxide.

3. (Original) The method for sterilizing industrial products of claim 1 further

comprising the step of evacuating the chamber after holding the product in the chamber and

pulsing in steam and/or heated inert gas into the chamber.

4. (Original) The method for sterilizing industrial products of claim 3 wherein

the heated insert gas is Nitrogen and wherein the sterilent gas is ethylene oxide.

5. (Currently amended) The method for sterilizing industrial products of claim 4

wherein the evacuating of the chamber results in the pressure in the range of 1 to 3 inches of

mercury, said evacuation of the chamber includes the step of real-time monitoring said

concentration of ethylene oxide gas in the headspace.

6. (Original) The method for sterilizing industrial products of claim 3 wherein

the step of degassing the product is accomplished by evacuating the chamber, pressurizing the

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chamber with 3 to 50 inches of mercury with an inert gas, and repeating until the product is

degassed.

7. (Original) The method for sterilizing industrial products of claim 3 wherein

the step of degassing the product is accomplished by evacuating the chamber down to 3 to 7

inches of mercury and pulsing the chamber with 5 to 9 inches of heated inert gas.

8. (Currently amended) The method for sterilizing industrial products of claims 6

and or 7 wherein the step of degassing the product is further accomplished by injecting the

chamber with warm air.

9. (Cancelled).

10. (Currently amended) The method for sterilizing industrial products of claim 9 5

wherein the step of degassing the product is accomplished by evacuating the chamber,

pressurizing the chamber with 3 to 50 inches of mercury with Nitrogen, and repeating until the

product is degassed.

11. (Currently amended) The method for sterilizing industrial products of claim 9.5

wherein the step of degassing the product is accomplished by evacuating the chamber down to 3

to 7 inches of mercury and pulsing the chamber with 5 to 9 inches of heated Nitrogen.

12. (Currently amended) The method for sterilizing industrial products of claims 10

and or 11 wherein the step of degassing the product is further accomplished by injecting the

chamber with warm air.

13. (Original) The method of claim 6 wherein evacuating the chamber as a part of

degassing the product is performed at a rate in the range of 0.1 to 0.5 inches per minute.

14. (Original) A method for sterilizing industrial products comprising the steps

of:

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conditioning an industrial product to be sterilized by placing the product in a chamber, evacuating the chamber, pulsing steam and/or heated inert gas into the chamber, and re-evacuating the chamber;

injecting ethylene oxide gas into the chamber;

introducing 5 to 15 inches of mercury of Nitrogen overpressure into the

chamber;

holding the product in the chamber while the product is sterilized; evacuating the chamber to a pressure of 1 to 3 inches of mercury; pulsing in steam and/or heated Nitrogen into the chamber; and injecting the chamber with warm air.

15. (Original) The method of claim 14 wherein evacuating the chamber to a pressure of 1 to 3 inches of mercury is done at a rate of 0.1 to 0.5 inches per minute.

16. (Original) The method for sterilizing industrial products of claim 15 wherein the step of pulsing in steam and/or heated Nitrogen into the chamber is repeated one or more times.